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TRANSMITTAL OF APPEAL BRIEF

Docket No.

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In re Application of: Coke	r et al.			
Application No.	Filing Date	Examiner		Group Art Unit
09/866,878-Conf. #4488	May 30, 2001	B. H. V. A. Nguyen		2122
	METHOD FOR SMART SCI	RIPTING CA	LL CENTERS A	ND
	TO THE COMMISSIONER	R OF PATEN	TS:	
Transmitted herewith in tripl of Appeal filed:April 2	icate is the Appeal Brief in th	is applicatior	n, with respect to	the Notice
The fee for filing this Appea	Brief is330.00		•	
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF:

COKER ET AL.

Hoang-Vu A

∴ APPLICATION No.:

09/866,878

NGUYEN-BA

FILED:

May 30, 2001

ART UNIT: 2122

For:

SYSTEM AND METHOD FOR SMART

CONF. NO:

EXAMINER:

4488

SCRIPTING CALL CENTERS AND

CONFIGURATION THEREOF

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Appeal Brief

Sir:

This brief is in furtherance of the Notice of Appeal filed in this case on April 22, 2004. The fees required under Section 1.17(f), and any required request for extension of time for filing this brief and fees therefor, are dealt with in the accompanying transmittal letter.

I. <u>REAL PARTY IN INTEREST</u>

The rights of the inventors in this application have been assigned to Siebel Systems, Inc., of San Mateo, California, as recorded at reel 012290, frame 0392.

II. RELATED APPEALS AND INTERFERENCES

Neither Appellants, Appellants' legal representative, nor the above-identified Assignee are aware of other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the present appeal.

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III. STATUS OF CLAIMS

Claims 1-42 have been presented; claims 1-31 have been canceled; claims 32-42 are presently pending, and stand finally rejected.¹

The Examiner rejected claims 32-34 under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent No. 6,131,085 to Rossides ("Rossides").

The Examiner rejected claims 35-42 under 35 U.S.C. § 112, first paragraph, for failing to provide support for the term "edges" in the specification.

Appellants hereby appeal the rejection of claims 32-42.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the final Office Action mailed on October 22, 2003.

V. SUMMARY OF INVENTION

Applicants' invention is directed to data structures used to represent interaction scripts. Interaction scripts are used by customer service representatives and others to guide a real-time interview with an interviewee or respondent, such as a customer that has phoned a customer service center, or a potential customer that has been called for a sales call. Each script identifies a number of questions that may be asked by the interviewer of a respondent. Each question, represented by a question "node" or "substructure" in the script, is connected to nodes for one or more answers that the respondent may give in response to the question. The nodes or substructures representing the answers anticipated for a particular question are connected to the question's node or substructure by line segments called edges. Edges or links also connect the nodes or substructures representing each answer to the next question that the interviewer will ask if the respondent supplies the answer. In some cases, for a particular answer, the script specifies a database query that, when executed, determines the next question that will be asked after that answer is given.

In this manner, the embodiments of Appellants' invention greatly increase the effectiveness of an interview between customer service representatives and an interviewee or respondent.

¹ The claims are shown in Appendix A.

VI. ISSUES

- A. Is the rejection of claims 32-34 under 35 U.S.C. § 102(e) over Rossides proper?
- B. Is the rejection of claims 35-42 under 35 U.S.C. § 112, first paragraph, proper?

VII. GROUPING OF CLAIMS

Claim 32 stands or falls by itself. Claim 32 is directed to a data structure for guiding interactions with a respondent, the data structure existing before the interactions with the respondent commence and having: a plurality of question substructures, each question substructure: specifying a question to be asked of the respondent, and containing one or more answer substructure identifiers each identifying an answer substructure; and a plurality of answer substructures, each answer substructure being identified by an answer substructure identifier, and specifying an answer anticipated from the respondent in response to question substructures containing the answer structure identifier of the answer substructure. Claim 32 stands rejected under 35 U.S.C. § 102(e) over Rossides.

Claims 33 and 34 stand or fall together. Claims 33 and 34 are directed to a first question, a first answer to the first question, information uniquely identifying a second question that is to be posed if, when the first question is posed, the first answer is given, and information specifying a query that, when executed, generates information uniquely identifying a third question to be posed if, when the first question is posed, the second answer is given. Claims 33 and 34 stand rejected under 35 U.S.C. § 102(e) over Rossides.

Claims 35 and 36 stand or fall together. Claims 35 and 36 are directed to a data structure for guiding interactions with a respondent, the data structure having a first table specifying a plurality of questions and for each question one or more answers, and a second table specifying a plurality of edges, each edge identifying a source answer for a source question and a destination question. Claims 35 and 36 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to provide support for the term "edges" in the specification.

Claims 37-42 stand or fall together. Claims 37-42 are directed to constructing an interaction script by reading definitions of a plurality of questions, receiving user input specifying definitions of a plurality of edges, each specified edge definition defining an edge that maps from one or more questions of a first question definition to a second question

definition, and storing the specified edge definitions for use in presenting the questions specified by the question definitions. Claims 37-42 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to provide support for the term "edges" in the specification.

VIII. ARGUMENTS

- A. The Rejection of Claims 32-34 Under 35 U.S.C. § 102(e) Over Rossides

 Is Improper
 - Legal Requirements for Anticipation
 U.S.C. § 102(e) provides:

A person shall be entitled to a patent unless—

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

To establish a *prima facie* case of anticipation, the Examiner must identify where "each and every facet of the claimed invention is disclosed in the applied reference." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1462 (Bd. Pat. App. & Interf. 1990).

Moreover, anticipation requires that each claim element must be identical to a corresponding element in the applied reference. Glaverbel Société Anonyme v. Northlake Mktg. & Supply, Inc., 45 F.3d 1550, 1554 (Fed. Cir. 1995). Indeed, the failure to mention "a claimed element (in) a prior art reference is enough to negate anticipation by that reference." Atlas Powder Co. v. E.I. duPont De Nemours, 750 F.2d 1569, 1574 (1984).

2. Rossides

Rossides is directed to an interface of a self-organizing knowledge database that stores both questions and answers. Any user using the knowledge database can read questions and answers stored in the knowledge database, and can add either a question or an answer to the questions and answers contained by the database. For example, a user who has found a first question in the database is able to enter a new, second question and label that second question as "more specific" than the first. The second question is labeled as a more specific question than the first and the two questions are linked in the database. Then, when

any user using the knowledge database has found the first question, the user is able to go and access the more specific question. (see Abstract).

Rossides represents the questions and answers stored in its knowledge database using graphs. In Figure 30B, Rossides shows a graph containing nodes representing both questions and answers. In Figure 30B, Rossides makes clear that circular nodes 3025, 3027, 3028, 3029, and 3030 all represent questions, while rectangular node 3026 represents an answer. In particular, arrows show that the answer represented by answer node 3026 is an answer to the questions represented by question nodes 3025, 3027, 3029, and 3030. Further, each arrow from a first circular question node to a second circular question node identifies the second circular question node as a more specific question ("MS-Q") relative to the first question node. For example, circular question node 3028, representing the question "What's IBM's phone number for tech support?" (see col. 162, line 32), is a more specific question than the question posed by question node 3025, "What's IBM's phone number?" Rossides makes very clear that the content of question node 3028 is not an answer to the question posed by node 3025, it is merely another question that is more specific than that posed by node 3025. Rather, the only answer shown to the question represented by node 3025 is the answer represented by answer node 3026, that is, "800-333-4444." (see col. 161, line 66-col. 162, line 8).

Thus, it can readily be seen that in Rossides, a question (question node) can be linked either to another more specific question (question node) or an answer (answer node), but an answer is never linked to a subsequent answer or question. In other words, an answer node is a terminal or leaf node.

3. The Examiner Has Failed to Identify Elements of Rossides that are Identical to the Elements Recited by Claims 32-34, and Thereby Failed to Establish a *Prima Facie* of Anticipation With Respect to Rossides

In both the third and fourth Office Actions, the Examiner rejected claims 32-34 under 35 U.S.C. §102(e) as being anticipated by Rossides. In both Office Actions, the Examiner states that "Figures 30B, 30C and the related discussion in the specification" of Rossides discloses every element of claims 32-34. (Office Action, June 12, 2003, pp. 3-5; Office Action, October 22, 2003, pp. 5-7).

The Examiner has failed to establish a *prima facie* case of anticipation with respect to claims 32-34 that is based on Rossides. The Examiner's burden to identify where "each and every facet of the claimed invention is disclosed in the applied reference" is not satisfied by his reference to Figures 30B, 30C and the related discussion in the specification of Rossides.

Claim 32 recites:

a plurality of question substructures, each question substructure: specifying a question to be asked of the respondent, and containing one or more answer substructure identifiers each identifying an answer substructure; and a plurality of answer substructures, each answer substructure being identified by an answer substructure identifier, [and] specifying an answer anticipated from the respondent in response to question substructures containing the answer structure identifier of the answer substructure.

The Examiner fails to point out where and how Rossides identically discloses the cited features of claim 32. In both the third and fourth Office Actions, the Examiner asserts that one of Rossides' question nodes, such as question node 3025, corresponds to Appellants' recited question substructure, while another of Rossides' nodes that constitutes a more specific question with respect to the first question node, such as question node 3028, corresponds to Appellants' recited answer. To the contrary, Rossides' more specific question nodes such as question node 3028 in no way specify an answer anticipated from the respondent in response to question substructures as recited. Rossides specifically identifies answer nodes, and does not identify any more specific question node as specifying an answer as recited. Indeed, merely looking at the questions represented by these two nodes, i.e., "What's IBM's phone number?" and "What's IBM's phone number for tech support?", the second question is clearly not an answer to the first question. Of the nodes shown in Figure 30B, only answer node 3026 represents an answer to the question represented by question node 3025. In the fourth Office Action, the Examiner responds to Appellants' argument "that Rossides' characterization of more specific question nodes such as question node 3028 as questions rather than answers precludes Rossides from satisfying [the] standard [for a proper rejection under 35 U.S.C. §102(e)] for claim 32" with the following statement:

The examiner notes that the answer in response to question substructure "What's IBM's Phone Number?", identified as "Q" is another question such as "For Tech Support", identified as (MS-Q1) or "For Inkjets?" The answer presented as another

question is designed to lead the script to a more specific answer expected by the customer, e.g., Tech support help or information about Inkjet products. Answers such as "For Tech Support?" is anticipated by the customer when he/she is seeking for the Tech Support help. Thus, the examiner maintains that the limitation recited in claim 32 reads on Rossides's [sic] teaching and that the rejection under 35 U.S.C. §102(e) of claim 32 is proper.

(Office Action, October 22, 2003, p. 2).

This statement does not satisfy the Examiner's burden to provide an indication of how Rossides identically discloses the claimed "a plurality of question substructures, each question substructure: specifying a question to be asked of the respondent, and containing one or more answer substructure identifiers each identifying an answer substructure; and a plurality of answer substructures, each answer substructure being identified by an answer substructure identifier, [and] specifying an answer anticipated from the respondent in response to question substructures containing the answer structure identifier of the answer substructure." At col. 162, lines 1-8, Rossides recites, "[s]he then enters one MS-Q, What's IBM's toll free number for inkjet tech support? 3027, and then enters the same answer. She then selects another existing MS-Q, What's IBM's phone number for tech support? 3028 and adds, for inkjets 3029 to this, thus creating another MS-Q. She enters the same answer again. Finally, she selects another existing MS-Q, What's a 1-800 number for IBM? 3030, and enters the same answer." Thus, according to Rossides, it is clear that a more specific question (i.e., an MS-Q) is truly a question, and not an "answer presented as another question" as asserted by the Examiner, as is made evident by the distinguished use of the terms "question," "more specific question," "direct answer" and "answer" throughout the cited reference of Rossides. The Examiner's failure to identify how Rossides identically discloses the claimed features constitutes a failure to make a prima facie case of anticipation with respect to claim 32.

With respect to claims 33 and 34, claim 33 recites "content of a first question; content of a first answer to the first question; [and] . . . information uniquely identifying a second question that is to be posed if, when the first question is posed, the first answer is given." Claim 34 recites similar language. The Examiner fails to point out where and how Rossides identically discloses the cited features of claims 33 and 34. As discussed above in conjunction with claim 32, Rossides in no way discloses the recited first answer to the first question that, if given when the first question is posed, causes a second question to be posed.

Claim 33 further recites "information specifying a query that, when executed, generates information uniquely identifying a third question to be posed if, when the first question is posed, the second answer is given." Claim 34 recites similar language. Appellants can find no mention in Rossides of queries that are executed to select a new question to be posed when a particular answer is given to an earlier-posed question. In the fourth Office Action, the Examiner responds to Appellants' argument that there is "no mention in Rossides of queries that are executed to select a new question to be posed when a particular answer is given to an earlier-posed question" with the following statement:

The examiner notes that the particular answer "What's a 1-800 Number for IBM?" is given to the earlier-posed question "What's IBM's Phone Number?" and that queries are being executed to select a new question to be posed such as "For Laptop Product Information?" or "For Laptop Complaints and Suggestions?" or "For Laptop Tech Support?" Contrary to Applicants' assertion, Rossides does teach queries that are executed to select a new question to be posed when a particular answer is given to an earlier-posed question.

(Office Action, October 22, 2003, p. 3).

This statement does not satisfy the Examiner's burden to provide an indication of how Rossides identically discloses the claimed "information specifying a query that, when executed, generates information uniquely identifying a third question to be posed if, when the first question is posed, the second answer is given." According to Rossides, a question may be linked (e.g., lead) to one or more more specific questions, but an answer never leads to another question. (see Figures 30-41; col. 161, line 11-col. 162, line 51). Thus, in contrast to the Examiner's assertion, Rossides does not teach "queries that are executed to select a new question to be posed when a particular answer is given to an earlier-posed question." The Examiner's failure to identify how Rossides identically discloses the claimed features constitutes a failure to make a *prima facie* case of anticipation with respect to claims 33 and 34.

4. Rossides Fails To Disclose All of the Elements Recited by Claims 32-34, and is Therefore Incapable of Supporting any Rejection Under 35 U.S.C. § 102(e)

Rossides fails to disclose all of the elements recited by claim 32. Claim 32 recites "a plurality of answer substructures, each answer substructure . . . containing a question identifier identifying the next question to be asked of the respondent if the specified

answer is received from the respondent." Rossides does not contain any disclosure of identifying a next question to be asked of a respondent subsequent to and based on an answer received from the respondent. To the contrary, Rossides discloses that while a question can be linked to a subsequent question (e.g., a less specific question to a more specific question) (see col. 162, lines 20-51), an answer can never be linked to a subsequent question. (see figures 30-41). Stated differently, an answer node is a terminal or end node in that it is not linked to another subsequent node. Based upon the disclosure of Rossides, in no case is a question asked of a respondent subsequent to and based on an answer received from the respondent. For at least this reason, claim 32 cannot be anticipated by any application of Rossides.

Rossides also fails to disclose all of the elements recited by claims 33 and 34. Claim 33 recites "information uniquely identifying a second question to be posed if, when the first question is posed, the first answer is given." Claim 34 recites "receiving a response to the posed first question . . [and] if the first specified response is identified as matching the received response, posing a second question based upon identification by the interaction script of the second question in connection with the first specified response." Rossides does not contain any disclosure of posing a subsequent question in response to receiving an answer to a preceding question. To the contrary, Rossides discloses only that a more specific question can be asked subsequent to asking a less specific question (e.g., a less specific question can be linked to a more specific question). (see col. 162, lines 20-51). According to Rossides, a question can never be asked subsequent to receiving an answer (e.g., an answer is never linked to a subsequent question). (see figures 30-41). Based upon the disclosure of Rossides, in no case is a question posed subsequent to and based on an answer to a preceding question. For at least this reason, claims 33 and 34 cannot be anticipated by any application of Rossides.

- B. The Rejection of Claims 35-42 Under 35 U.S.C. § 112, First Paragraph, is Improper
 - 1. <u>Legal Requirements for 35 U.S.C. § 112, First Paragraph</u> 35 U.S.C. § 112, first paragraph, provides:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and

exact terms as to enable any person skilled in the art which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

To reject a claim under 35 U.S.C. § 112, first paragraph, for lack of adequate written description, the Examiner must establish a *prima facie* case by providing reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed. MPEP § 2163.

Moreover, the examiner has the initial burden of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976). A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997).

2. The Examiner Has Failed To Make a *Prima Facie* Case of Lack of Adequate Written Description Under 35 U.S.C. § 112, First Paragraph

In both the third and fourth Office Actions, the Examiner rejected claims 35-42 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification. In both Office Actions, the Examiner asserted that there appears to be no support for the term "edges" in the specification. (Office Action, June 12, 2003, pp. 2-3; Office Action, October 22, 2003, p. 4).

The Examiner has failed to establish a *prima facie* case of lack of adequate written description with respect to claims 35-42. The Examiner's "initial burden of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims" is

not satisfied by merely stating that "[t]here appears to be no support for these limitations in the specification." (Office Action, June 12, 2003, p. 3; Office Action, October 22, 2003, p. 4).

To the contrary, the application as filed contains proper support for the term "edges." In particular, one of ordinary skill in the art would recognize the structure shown in Figure 1 as a graph or a tree, in which *nodes* (ovals, such as ovals 11, 13a, and 15a) are connected by *edges* (line segments, such as the line segment connecting oval 11 to oval 13a). See, for example, definition no. 2 for *edge* in Microsoft Computer Dictionary, 5th Edition, 2002, page 185: "in data structures, a link between two nodes on a tree or graph." This is especially true in view of the following sentence occurring at page 19, lines 17-18 of the application as filed: "Graphically, a 'script' may be represented by a graph whose nodes are pages, sets of questions, or even individual questions"; and the sentence occurring at page 20, lines 29-30 of the application as filed: "Internally, in a graphical representation, scripts are implemented with 'paths' and branches are implemented with 'edges." In the fourth Office Action, the Examiner responds to Appellants' argument that the application as filed contains proper support for the term "edges" with the following statement:

Applicants' showing of evidence of support in the specification for the term "edges" has been fully considered but the support is considered to be marginal because it is unclear how the limitation "internally, in a graphical representation, scripts are implemented with 'paths' and branches are implemented with 'edges'", page 19, lines 29-30, cited by applicants provides adequate support for the following limitation "a second table specifying a plurality of edges, each edge identifying (1) a source answer for a source question and (2) a destination question, such that the contents of the first table can be used to pose a question and . . " recited in claim 35. Therefore, the rejection of claims 35-42 under 35 U.S.C. § 112, first paragraph is maintained.

(Office Action, October 22, 2003, p. 3).

This statement does not satisfy the Examiner's burden to present evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims. First, the limitation cited by the Examiner above in maintaining the rejection of claims 35-42 does not appear in claims 37-42. The Examiner's failure to present evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention

defined by the claims constitutes a failure to make a *prima facie* case of a lack of adequate written description under 35 U.S.C. § 112, first paragraph, with respect to claims 37-42.

Second, the application as filed contains proper support for the claimed "a second table specifying a plurality of edges, each edge identifying (1) a source answer for a source question and (2) a destination question, such that the contents of the first table can be used to pose a question and . . . " recited in claim 35. At page 20, lines 3-5, the application as filed recites, "[t]he user keys for S CS EDGE are the parent script (PATH ID), the from question (FROM QUEST ID) and optionally the answer in the from question (FROM ANSWR ID)." Moreover, Appendix B of the application as filed defines S CS EDGE as a database table, and provides a description of the table. (middle of page 40). Thus, a person skilled in the art would recognize in the original disclosure a description of the invention defined by claims 35 and 36. The Examiner's failure to present evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure, and the aforementioned description of the table provided in the original disclosure, a description of the invention defined by the claims constitutes a failure to make a prima facie case of a lack of adequate written description under 35 U.S.C. § 112, first paragraph, with respect to claims 35 and 36.

3. The Application as Filed Fully Sets Forth the Claimed Invention as Required by the Written Description Requirement Under 35 U.S.C. § 112, First Paragraph

As discussed extensively above, the application as filed contains proper support for the claimed invention to enable persons skilled in the art to recognize in the original disclosure a description of the invention defined by the claims. The application as filed fully satisfies the written description requirement under U.S.C. § 112, first paragraph, for the reason that Appellants have shown possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention.

IX. SUMMARY

Each of claims 32-34 has been improperly rejected, both (a) in that the Examiner has failed to make a *prima facie* case of unpatentability, and (b) in that the cited references would not support any rejection of these claims. Each of claims 35-42 has been improperly rejected, both (a) in that the Examiner has failed to make a *prima facie* case of lack of adequate written description, and (b) in that the application as filed adequately describes the claimed invention. Accordingly, Appellants seek the reversal of the rejection of these claims.

Respectfully submitted,

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6-18-04

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Enclosures:

Appendix A

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APPENDIX A

PENDING CLAIMS

1-31. (Cancelled)

32. One or more computer memories collectively containing a data structure for guiding interactions with a respondent, the data structure existing before interactions with the respondent commence, comprising:

a plurality of question substructures, each question substructure:

being identified by a question substructure identifier,

specifying a question to be asked of the respondent, and

containing one or more answer substructure identifiers each identifying an answer substructure; and

a plurality of answer substructures, each answer substructure:

being identified by an answer substructure identifier,

specifying an answer anticipated from the respondent in response to question substructures containing the answer substructure identifier of the answer substructure, and

containing a question identifier identifying the next question to be asked of the respondent if the specified answer is received from the respondent.

33. One or more computer memories collectively containing a data structure for guiding interactions with a respondent, the data structure existing before interactions with the respondent commence, comprising:

content of a first question;

content of a first answer to the first question;

content of a second answer to the first question;

information uniquely identifying a second question that is to be posed if, when the first question is posed, the first answer is given; and

- information specifying a query that, when executed, generates information uniquely identifying a third question to be posed if, when the first question is posed, the second answer is given.
- 34. A method in a computing system for interacting in accordance with an interaction script, comprising:

posing a first question specified by the interaction script;

receiving a response to the posed first question;

identifying among a first and second response specified by the interaction script a specified response matching the received response;

if the first specified response is identified as matching the received response, posing a second question based upon identification by the interaction script of the second question in connection with the first specified response; and

if the second specified response is identified as matching the received response:

executing a database query specified by the interaction script in connection with the second specified response to identify a third question, and

posing the identified third question.

- 35. One or more computer memories collectively containing a data structure for guiding interactions with a respondent, comprising:
 - a first table specifying (1) a plurality of questions, and (2) for each question, one or more answers to the question; and
 - a second table specifying a plurality of edges, each edge identifying (1) a source answer for a source question and (2) a destination question,
 - such that the contents of the first table can be used to pose a question and select an answer for the question, and such that the contents of the second table can be used to choose an edge having the posed question as its source question and the selected answer as its source answer, and the identified edge used to pose the destination question identified by the chosen edge.

- The computer memories of claim 35, further comprising a third table, the third table specifying a plurality of edges, each edge identifying (1) a source answer for a source question and (2) a destination question, such that third table may be used in place of the second table to determine, after a question has been posed and an answer to the posed question selected, a destination question to be posed next.
- 37. A method in a computing system for constructing an interaction script, comprising:

reading definitions of a plurality of questions, each question definition defining a question and zero or more answers to the question;

receiving user input specifying definitions of a plurality of edges, each specified edge definition defining an edge that maps from one or more questions of a first question definition to a second question definition and signifying that, if one of the mapped-from questions of the first question definition is selected in response to the question defined by the first question definition, the question defined by the second question definition is to be posed; and

storing the specified edge definitions for use in presenting the questions specified by the question definitions.

- 38. The method of claim 37, further comprising validating the edge definitions specified by the received user input before storing the specified edge definitions.
- 39. The method of claim 38 wherein the validation determines that, for each question definition, the defined question is mapped-to by at least one of the edges defined by the edge definitions.
- 40. The method of claim 38 wherein the validation determines that, for each question definition, each of the defined answers is the mapped-from answer of exactly one of the edges defined by the edge definitions.

- 41. The method of claim 38 wherein the validation determines that, for each edge definition, the defined edge maps from a question and answers defined by one of the plurality of question definitions, and maps to a question defined by one of the plurality of question definitions.
- 42. A computer-readable medium whose contents cause a computing system to construct an interaction script by:

reading definitions of a plurality of questions, each question definition defining a question and zero or more answers to the question;

receiving user input specifying definitions of a plurality of edges, each specified edge definition defining an edge that maps from one or more questions of a first question definition to a second question definition and signifying that, if one of the mapped-from questions of the first question definition is selected in response to the question defined by the first question definition, the question defined by the second question definition is to be posed, and

storing the specified edge definitions for use in presenting the questions specified by the question definitions.